Background on Prioritization In Water Quality Management Programs

Faced with limited resources, federal and state managers agree there is a need for prioritization within clean water programs. The Environmental Protection Agency requires or is encouraging frameworks for prioritization within the programs associated with administration of the federal Clean Water Act. Prioritization does ***not*** mean changes to long-term goals for water quality; e.g. the level of protection afforded a given waterbody. However, it is an acknowledgement that to be strategic in utilization of the limited resources currently available that certain geographic areas may receive greater focus and attention than others within a given time period. Even within our admittedly small state, the capacity of the state to support work on a statewide basis in all watersheds at the same time simply does not exist. Accordingly, it is appropriate, working within the context of our long-term goals for water quality, to set short-term priorities as a means of advancing progress toward those goals.

Existing Prioritization Activities:

The DEM Office of Water Resources programs have for some time reflected the following general priorities in its protection and restoration programs: drinking water supplies (surface water and groundwater), shellfish growing areas and beaches. In addition, as more TMDLs have been completed, DEM has prioritized implementation of TMDL recommended actions in certain funding programs; e.g. 319 and BWRF.

Examples of existing applications of prioritization:

- ***DEM 303(d) List*** – In the schedule of TMDLs development, the DEM-OWR reflected an initial emphasis on water supplies and shellfishing areas; e.g. Stafford Pond was the first TMDL completed.

- ***DEM Project Priority List (PPL)*** – a formal scoring system is used to rate and rank all projects proposed for inclusion on the Project Priority List. The PPL is associated with the administration of the Clean Water State Revolving Fund (CWSRF). It is limited to governmental projects of a size appropriate for a potential SRF loan.

- ***DEM Nonpoint Source (319) Grants and Narragansett Bay and Watershed Restoration Fund (BWRF)***- The scoring system for these competitive grant programs gives weight to TMDL implementation and public health uses (drinking water, shellfishing and beaches) among other factors such as readiness to proceed.

- ***Natural Resource Conservation Service (NRCS) – National Water Quality Initiative***: Under a federal initiative coordinated by NRCS with EPA, certain watersheds were selected for targeted activities to advance protection and restoration. In RI, the NWQI watersheds are: 1) "Sakonnet River" -- East side of Aquidneck Island, including Maidford River, and that part of Tiverton and Little Compton draining to Sakonnet; 2) "Upper East Passage" – focus on northwest portion of Aquidneck Island, including Lawton Valley; 3) Tomaquag Brook in the Pawcatuck watershed.

- ***DEM Annual PPG/Workplan***: Upon request from EPA, DEM has identified certain watersheds as areas of focus within the documents governing the award of EPA funding to the DEM Office of Water Resources. These are developed as part of an annual workplan process.

Recent EPA Directives on Prioritization:

In recent years, EPA has been advocating for prioritization of watersheds as part of strategic planning in clean water programs. The federal 319 program provides the following guidance and will require, as a condition of continued federal funding, that the State articulate a means for prioritizing watersheds as part of its state water quality management plan.

From EPA 319 Guidance (2013) Appendix A NPS Management Plan:

#3 The state NPS management program emphasizes a watershed management approach and includes an explanation of the state's approach to prioritizing waters and watersheds to achieve water quality restoration and protection.

#4 With limited resources, the state will likely need to make choices about the relative emphasis on restoring impaired waters and protecting high quality waters. The state's program describes how it will approach setting priorities and aligning resources between these two areas of emphasis based on their water quality challenges and circumstances.

#5 The state establishes a process to assign priority and to progressively address identified waters and watersheds by conducting more detailed watershed assessments, developing watershed-based plans, and implementing the plans. Factors used by the state to assign priority to waters and watersheds may include a variety of considerations, for example:

- *human health considerations including source water protection for drinking water;*
- *ecosystem integrity, including ecological risk and stressors;*
- *beneficial uses of the water;*
- *value of the watershed or ground water area to the public;*
- *vulnerability of surface or ground water to additional environmental degradation;*
- *likelihood of achieving demonstrable environmental results;*
- *degree of understanding of the causes of impairment and solutions capable of restoring the water;*
- *implementability (site-specific technical feasibility);*
- *adequacy of existing water quality monitoring data or future monitoring commitments;*
- *degree to which TMDL allocations made to point sources are dependent on NPS reductions being achieved;*
- *extent of partnerships with other federal agencies, states, local public and private agencies/organizations and other stakeholders to coordinate resources and actions;*
- *availability and access of funding sources other than section 319(h); and*
- *readiness to proceed among stakeholders and project partners.*

The state links its prioritization and implementation strategy to other programs and efforts such as those listed under component #3. In establishing priorities for ground water activities, the state considers wellhead protection areas, ground water recharge areas, and zones of significant ground water/surface water interaction, including drinking water sources.

States may wish to consider the following scenarios for prioritizing the protection of unimpaired/high quality waters:

Watersheds or portions of watersheds with unique, valuable, or threatened species or critical aquatic habitats of these species;
Waters and watershed areas (including groundwaters where appropriate) that serve as source water for a public drinking water supply;

Protection of high quality waters in watersheds that contain some impairments;
Waters near geographic areas where rapid land use development is occurring;
Waters where data trends indicate water quality degradation is occurring;
Restored waters requiring continued water quality assessment and maintenance of BMPs to assure unimpaired status;
Outstanding Natural Resource Waters or other state-defined categories of high quality waters;
Watersheds contributing high nutrient loads to downstream waters.

303(d) Water Quality Restoration and Protection:
The EPA 303(d) Program has recently issued document articulating a long-term vision for assessing, restoring and protecting surface waters. This program is associated with the water quality assessment process that results in the statewide integrated report and list of impaired waters as well as TMDL development. The vision document establishes the following goal for prioritization:

For the 2016 integrated reporting cycle and beyond, States review, systematically prioritize, and report priority watersheds or waters for restoration and protection in their biennial integrated reports to facilitate State strategic planning for achieving water quality goals.

The intent if the Prioritization Goal is for States to express CWA 303(d) program priorities in the context of the State's broader, overall water quality goals. The CWA 303(d) program provides an integrating function because it translates state water quality standards into pollution reduction targets for the point and non-point sources management programs as well as other programs outside the CWA…Establishing CWA program priorities will lead to more efficient and effective program management, yielding faster progress toward water quality improvement and protection.

Discussion Points:

1. Is there agreement that there is a need to prioritize watersheds in order to be strategic in water resource management – both protection and restoration?

2. What are benefits or advantages of prioritizing?

   Positive:
   - Focused effort, build on previous efforts, synergistic effect with partners,
   - More likely to achieve water quality results than widely scattered actions ("random acts of BMPs").
   - By articulating areas of focus, easier to align partners to work collaboratively.

3. What are the drawbacks?

   Negative:
   - Certain resources are not addressed for long periods.
   - Potential loss or erosion of public support in those watersheds not designated for immediate attention.
   - Missed opportunities to capitalize on local interest.

4. What is the appropriate balance between protection and restoration activities? Has Rhode Island struck the correct balance?

5. Should the urban services boundary be reflected in the prioritization framework?

6. How well are the priorities with respect to protection and restoration within a given watershed articulated?

7. What does it mean in terms of implementation of our state programs to establish priorities?
   - Grants/loans
   - Implementation efforts
   - Deployment of state staff

OVERARCHING POLICIES

These policies set the framework for water quality management in RI. They cut across all of the topics (and their strategies) that are discussed in more detail later in the Plan.

Water Quality Management Policies/Principles

- Protection and restoration are equally important to achieving RI's goals for water quality.
- Water pollution should be prevented whenever possible as it is a more cost-effective strategy than source control and restoration.
- Watersheds are the appropriate unit for managing water quality and water resources.
- Water quality management is based on sound science and integrates new information, including information on changing climate conditions, into policies and decision-making.
- New technologies are adopted for use in water pollution management where beneficial.
- Monitoring is an essential component of water quality management that yields information necessary for effective adaptive management.
- Indicators of environmental conditions and performance as well as analytical tools are used to evaluate and report on progress toward water quality goals and objectives.
- Through public outreach, Rhode Island citizens are informed and aware of water quality management priorities and support efforts to prevent and abate water pollution problems.
- A collaborative effort is necessary across all governmental jurisdictions, agencies and programs to ensure success in protecting and restoring RI's water resources.

Roles and Responsibilities

- All levels of government (federal, state, local), non-governmental organizations (NGOs) including watershed organizations, private entities and individuals share in the responsibility and duty to protect and restore RI's water resources.
- State and quasi-state facilities demonstrate leadership in adopting effective water quality management practices.
- The State develops and maintains the capacity to respond to new issues (e.g., emerging contaminants) impacting water quality or water quality management in a responsible, scientifically defensible and timely manner.
- Compliance with applicable federal, state and local regulatory programs is necessary for water quality protection and restoration.
- The State and other partners provide technical assistance/training to practitioners and local governments to facilitate implementation of water quality management strategies.

- The Federal and State governments continue to provide financial assistance to manage water quality and abate water pollution.

- Local government capacity is increased to advance implementation of strategies to improve water quality and to integrate wastewater and stormwater planning and management in municipal operations.

- Implementation of management at a regional scale is pursued where demonstrated to be most effective.

- An active watershed organization exists in each major RI watershed and serves to engage citizens in activities to protect and restore their watershed.

- Each of RI citizens contributes to improving water quality by being aware of our water resources and taking steps (often simple) to protect these resources.

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